South Carolina Department of Health lite: and Environmental Control

Break:

2600 Bull Street Columbia, S.C. 29201

Commissioner Michael D. Jarrett



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MEMORANDUM

TO:

Coleman Miles

Site Engineering Section

Division of Site Engineering and Screening Bureau of Solid and Hazardous Waste Management

Michael Muthig, Manager 100 W

Superfund and Solid Waste Section

Division of Hydrogeology

Bureau of Solid and Hazardous Waste Management

DATE: October 25, 1988

RE:

Medley Farm Site SCD 98Ø 558 142 Cherokee County

Remedial Investigation/Feasibility Study Plan

Dated October 1988

The referenced plan has been reviewed. Overall, the proposed approach taken at the site is good; however, there are a few items that should be considered during the preparation of the final plan. It should be noted that because of time constraints, it was not possible to conduct a comprehensive review of the document. Therefore, the items below reflect concerns with major issues and may not address all ground-water problems that may exist.

- 1) P.14 Although listed under phased work, the objectives of the plan should include (1) characterization of the site geologic and hydrologic conditions and (2) determination of the rate of contaminant migration.
- 2) P.16 It does not appear that four well clusters will be sufficient to characterize the site. Additional wells should be proposed for Phase IA, IB or the remedial design.
- 3) P.16 Some short-term (e.g. hourly, daily, weekly) waterlevel measurements should be taken to better evaluate temporal variation.



- 4) P.16 Sampling of monitor wells 2 and 4 will provide little information concerning ground water quality. Additional sampling should be considered.
- 5) P.16 Slug testing will provide some useful information, however, a pump test(s) will need to be conducted at some point prior to remedial design.
- 6) P.50 As stated above, it is likely that additional ground-water samples will be needed to adequately characterize contamination. Also, the number of samples proposed in Table 5.1 is not consistent with the work described on page 16.
- 7) P.50 It is proposed that in areas where no appreciable water is encountered above bedrock, only one well (instead of a cluster) will be installed. It is recommended that in this situation a bedrock well cluster be installed to evaluate vertical flow in bedrock.
- 8) P.50 The proposed monitor well locations (and the map depicting the locations) appears inadequate. Wells should be installed immediately downgradient of each major source of contamination as well as at the site boundary. In addition, there appears to be a potential for radial flow (to the north, east, and south) from the site. Wells should be in positions to evaluate flow rate and direction to ensure that monitoring is being conducted in the appropriate areas (and depths).
- 9) P.52 Auger refusal is not always a reliable indication of bedrock. Drill cuttings and drill rates should also be closely examined to evaluate the true top of bedrock.
- 10) Results of grain size analysis should be carefully examined to evaluate the best combination of screen and gravel pack. Improperly constructed saprolite wells will yield samples with high turbidity and may cause problems with sampling and analysis.